

COMBINED ICE HOUSE AND REFRIGERATOR

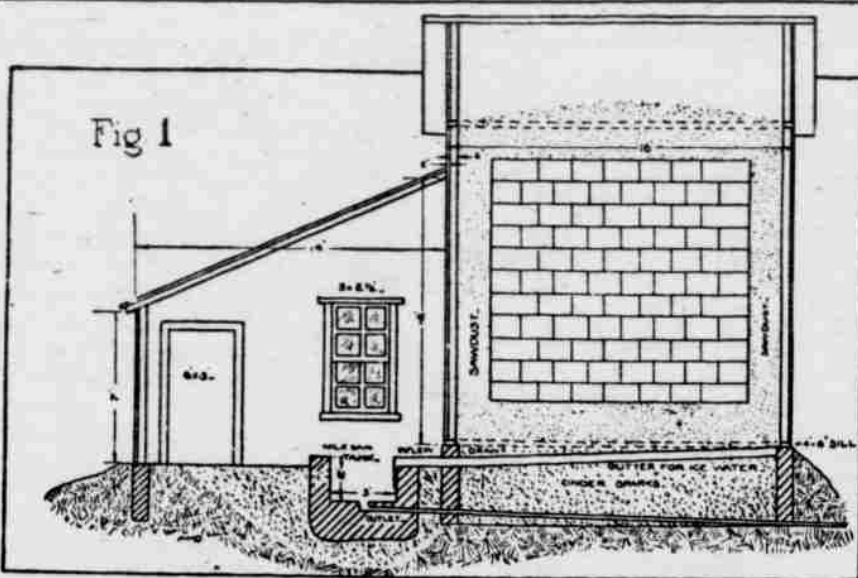


Fig. 1.—Longitudinal Section of a Combined Ice House and Dairy.

(Prepared by the U. S. Department of Agriculture.)

Even where for convenience and economy it is desirable to have the dairy under the same roof as the ice house it is not satisfactory to attempt to combine the ice storage with a cold store. When it is necessary to use ice for chilling milk and other dairy products it is better to remove the ice from the ice house or compartment and place it in a specially constructed ice box or refrigerator, rather than to attempt to maintain a cold room by storing the ice about and in contact with it. The chief argument against the combined arrangement is that it prevents the storage of ice in a solid mass. As a result the waste is much greater. Again, the requirements of

tain high-class refrigeration by installing a brine-circulating system. The principle on which this patented system works is the same as mechanical refrigeration, except that the cold is secured through a freezing mixture of ice and salt in a tank in which the primary coils are located, as shown at B in figure 3. As the brine in these coils becomes chilled it passes out through the bottom of the coils and slowly flows through the coils marked C, which are located in the cooling room. The heat of this room is absorbed by these chilled pipes, and as the brine warms up it passes out and up into the primary coils, and in this way a continuous circulation is maintained between the two pipe systems.

For convenience, the ice house can be made a part of the structure, so that the ice can be elevated above the storage chamber and directly into the crusher, which can be located in the attic above the primary coils indicated at B. As the drawing shows, the space above the cooling room might be utilized as a farm shop or for a cooperage, if one were to be installed in connection with an apple orchard. It would not be advisable to attempt to install this system without having an experienced engineer calculate the piping necessary for any given storage room as well as the cooling tank. The question of installation is also a very important one, and should be carefully specified.

This construction is adapted to small or to very extensive plants. The department of agriculture used this system in a plant which has been installed at the Arlington experimental farm. The cooling room in this case is 28 by 30 feet with eight-foot ceilings. Sufficient space is thereby provided to store 800 barrels of apples.

Detailed information regarding the storage of butter and cheese may be had by those interested in two bulletins of the United States department of agriculture. Bulletin 83, bureau of animal industry, gives information on cheese, and Bulletin 84, bureau of animal industry, on butter. These pamphlets will be sent free of charge as long as the supply lasts, after which they may be purchased for a small price of the superintendent of documents.

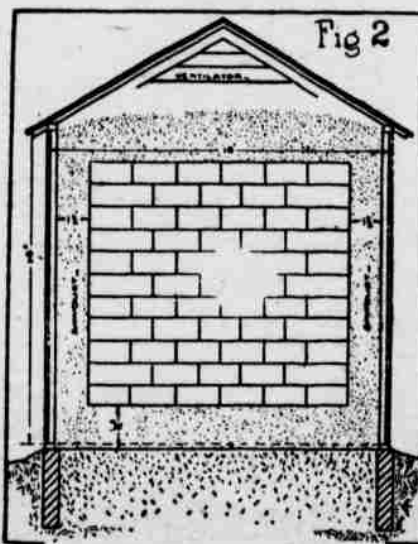


Fig. 2.—Transverse Section of a Combined Ice House and Dairy.

the storage room and the refrigerator vary from time to time. Advantage can be taken of these fluctuations to husband the ice supply when the two are separate. There are decided advantages in having the ice supply convenient to the dairy house or refrigerator, but it is poor economy to build the refrigerator or cold store inside the ice storage. The arrangement suggested in figures 1 and 2 is to be preferred.

Where an abundant supply of natural ice can be harvested annually it will be a simple matter to main-

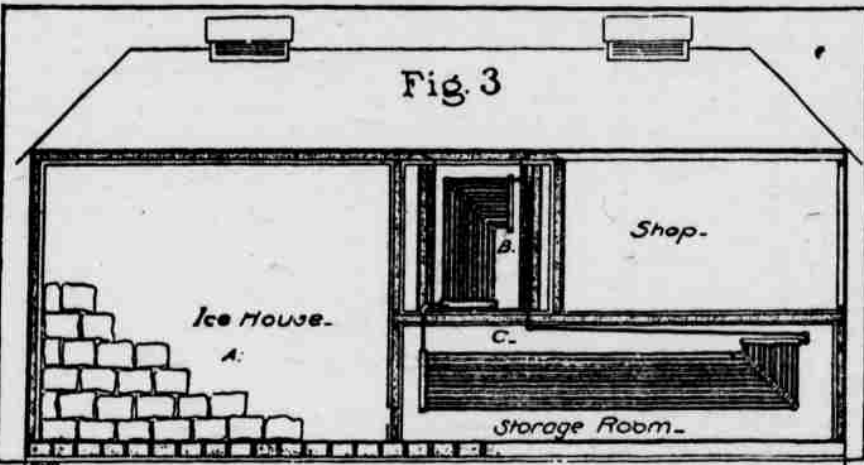


Fig. 3.—Diagram Showing a Combined Ice House and Cold-Storage Plant.

GOOD QUALITIES OF MANURE

All Growing Plants Require Certain Food Elements Which Must Be Secured From the Soil.

Some farmers used to have the notion that the only reason they had for hauling manure onto the fields was to get it out of their way. This class of men would have thrown the fertilizer into a hole had one been handy. Of late it is difficult to find a farmer who does not believe in the fertilizing qualities of manure. Manure is the cheapest and most efficient fertilizer which the farmer can use upon his land.

Growing plants require certain food elements which must be secured from the soil. All plants require the same ingredients; but the amounts vary in different plants. The farmer who puts his land in good shape during the fall and winter by fertilizing it with manure will raise the big grain crops the following summer.

Live stock manure contains about 80 per cent of the plant food elements

contained in the food eaten by the stock. This food was taken from the soil; so it is only reasonable that if it is not returned in some form the soil will become depleted. Barnyard manure is mixed with bedding, which contains the plant food elements taken from the ground that produced its growth. Naturally this combination is not as strong in fertilizing elements as pure manure; but it has immense value as a fertilizer. The bedding absorbs the liquids, which would otherwise be a loss. The organic portion of a load of manure is just as valuable for fertilizing purposes as the nitrogen, potash, acid, etc., contained in the manure. Before the organic portion is of value as a fertilizer it must pass through a process of rotting. This process turns it into humus—one of the elements in which many soils are most lacking.

Instill Hardiness.

It is a mistake to discard a breed on the supposition that it is not a hardy one. Hardiness can be instilled in any breed by pure food, proper attention and systematic matings.

HOW SHE GOT HIM LANDED

As an Example of Really Clever Manipulation This Is Surely Hard to Beat.

Of course, when she stopped in front of the jeweler's window, he had to stop, too. It would hardly have been polite to walk on and leave her there "O, see the tray full of lovely diamond rings!" she cried.

"Yes," he admitted. "They're engagement rings!" "Shouldn't be surprised," he replied. "But come on, we've seen them now, you know."

"They're the gorgeouset engagement rings!" she sighed. "The diamonds look diamond colored now, but when you put them on your finger they're a bright pink."

"Peruke, I hardly believe that," he rebuked.

"They do! They do! Come and I'll show you." And she dragged him into the shop and had the jeweler bring the rings in out of the window. "Now slip one on my finger and we'll see," she pouted, and held out the dangerous finger of her left hand, and, with considerable curiosity, he slipped a ring on it.

"Sigourd!" she exclaimed happily. "This is so sudden!"

"Peruke!" he cried.—Detroit Free Press.

STOP EATING MEAT IF KIDNEYS OR BACK HURT

Take a Glass of Salts to Clean Kidneys if Bladder Bothers You—Meat Forms Uric Acid.

Eating meat regularly eventually produces kidney trouble in some form or other, says a well-known authority, because the uric acid in meat excites the kidneys, they become overworked; get sluggish; clog up and cause all sorts of distress, particularly backache and misery in the kidney region; rheumatic twinges, severe headaches, acid stomach, constipation, torpid liver, sleeplessness, bladder and urinary irritation.

The moment your back hurts or kidneys aren't acting right, or if bladder bothers you, get about four ounces of Jad Salts from any good pharmacy; take a tablespoonful in a glass of water before breakfast for a few days and your kidneys will then act fine. This famous salts is made from the acid of grapes and lemon juice, combined with lithia, and has been used for generations to flush clogged kidneys and stimulate them to normal activity; also to neutralize the acids in the urine so it no longer irritates, thus ending bladder disorders.

Jad Salts cannot injure anyone; makes a delightful effervescent lithia-water drink which millions of men and women take now and then to keep the kidneys and urinary organs clean, thus avoiding serious kidney disease.—Adv.

Rash Wish Regretted.

Once when Strickland Gillilan was lecturing at the home of "Tama Jim" Wilson (Tama, Ia.) the afternoon was dark in the big Chautauqua pavilion, and the speaker was in almost total eclipse.

"Taffy" Sears, a fellow-lecturer, standing near the back of the building, heard a woman whisper:

"My! I wish they'd turn on the footlights so we could see his face!"

Pretty soon the lights flashed up, she caught a good look at the homely and expressionless mug of him, and she exclaimed far more fervently:

"My! I wish they'd turn out those footlights!"—Judge.

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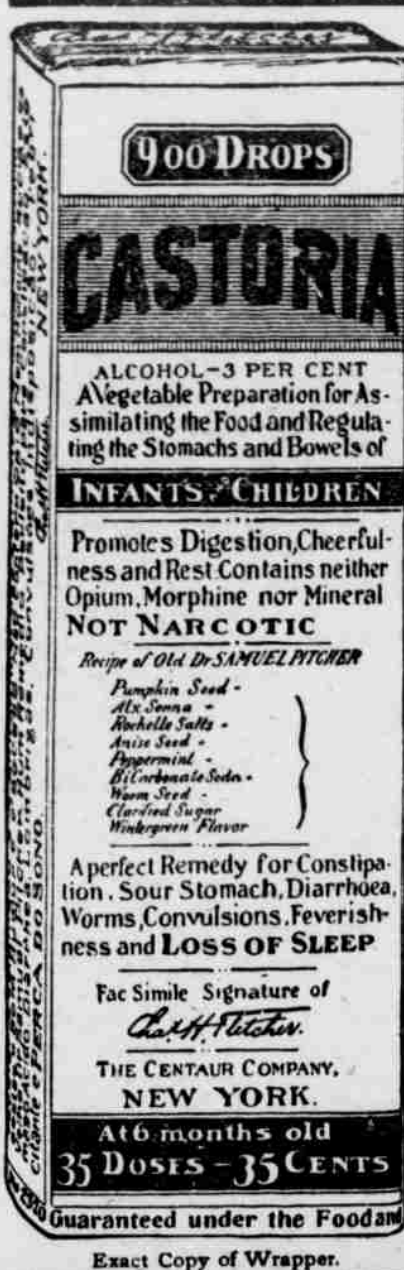
Precede shampoos, by touches of Cuticura Ointment if needed to spots of dandruff, itching and irritation of the scalp. Nothing better for the complexion, hair, hands or skin than these fragrant supercreamy emollients. Also as preparations for the toilet.

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